

	UNITS	UNIT COST	TOTAL COST	NOTES
COMPUTATIONAL EQUIPMENT			\$ 28,000	
Linux Workstation	3	\$ 2,000.00	\$ 6,000.00	One for me, two additional workstations for students
In-house HPC GPU Cluster with storage	1	\$ 21,000.00	\$ 21,000.00	2 GPU compute nodes, 12 TB RAID storage
NSF XSEDE High-performance computer time	0	\$ -	\$ -	I intend to apply for compute time through XSEDE, worth tens of thousands of dollars
Software	0	\$ -	\$ -	All software I use is freely available to academic institutions
Desk + chair	2	\$ 200.00	\$ 400.00	Computer stations for undergraduates
Backup system (per year)	2	\$ 150.00	\$ 300.00	Crashplan Family - \$150/year
Printer	1	\$ 300.00	\$ 300.00	
EXPERIMENTAL EQUIPMENT			\$ 43,469	
Set of micropipettes	2	\$ 1,266.98	\$ 2,533.96	2, 10, 20, 200, 1000 µL pipettes
Multichannel pipette, 200µL	1	\$ 700.00	\$ 700.00	
EasyPet	1	\$ 320.00	\$ 320.00	
PCR Thermal cycler	1	\$ 4,000.00	\$ 4,000.00	
Shaker incubator/refrigerator	1	\$ 5,000.00	\$ 5,000.00	Incubate/refrigerate both 2L-flasks and plates. Small one needed for lab, otherwise can use departmental equipment for scaled-up growths.
Waterbath 2L	1	\$ 400.00	\$ 400.00	
Freezer, -20°C	1	\$ 2,000.00	\$ 2,000.00	Full size, for reagents, long-term storage, etc
Refrigerator, +4°C	1	\$ 1,000.00	\$ 1,000.00	Small, for plates, samples
Microcentrifuge	1	\$ 2,080.90	\$ 2,080.90	
Minicentrifuge	1	\$ 211.66	\$ 211.66	
Centrifuge tubes/bottles	1	\$ 300.00	\$ 300.00	Depends on rotors
DNA gel setup	1	\$ 430.00	\$ 430.00	
Protein gel/transfer setup	1	\$ 1,400.00	\$ 1,400.00	
Western blot apparatus	1	\$ 1,500.00	\$ 1,500.00	For washing blots
Thermomixer (24 x 1.5mL tubes)	1	\$ 2,000.00	\$ 2,000.00	RT to 99°C
Spectrometer	1	\$ 10,000.00	\$ 10,000.00	µL and mL capacity, DNA/protein concentrations and OD600
Bunsen burner	1	\$ 53.00	\$ 53.00	
Vacuum/natural gas tubing	1	\$ 100.00	\$ 100.00	
Vortex	1	\$ 300.00	\$ 300.00	
Stirring hot plate	1	\$ 300.00	\$ 300.00	
Sonicator	1	\$ 3,000.00	\$ 3,000.00	For cell lysis
Magnetic stir bars	1	\$ 40.00	\$ 40.00	Various sizes, 4", 2", 1", cuvette
Thermometer	3	\$ 20.00	\$ 60.00	For refrigerator, freezer, waterbath
Microwave oven	1	\$ 40.00	\$ 40.00	Standard microwave
Glass beads (3mm, 500g)	2	\$ 30.00	\$ 60.00	For spreading bacteria on plates
Quartz cuvettes	4	\$ 300.00	\$ 1,200.00	1 mL and 100 µL for CD and UV/Vis
Glass bottles	5	\$ 70.00	\$ 350.00	1L, 500mL, 250mL, 100 mL (10/case)
Vacuum filtration system	1	\$ 150.00	\$ 150.00	Nalgene Polysulfone Reusable Bottle Top Filters
Baffled flasks - 2L	2	\$ 150.00	\$ 300.00	3/Case
Baffled flasks - 250 mL	1	\$ 204.00	\$ 204.00	12/Case
Graduated cylinders	2	\$ 50.00	\$ 100.00	1000mL, 250 mL
Protein purification columns	5	\$ 50.00	\$ 250.00	Gravity liquid chromatography column + stopcock
Tube racks - microcentrifuge (7 ct)	4	\$ 25.00	\$ 100.00	
Tube racks - 15/50 mL (each)	10	\$ 11.00	\$ 110.00	
Freezer boxes (5 ct)	5	\$ 25.00	\$ 125.00	
Timers	2	\$ 10.00	\$ 20.00	
Refrigerator/freezer racks (4x4 slots)	8	\$ 60.00	\$ 480.00	
Lab tape	1	\$ 50.00	\$ 50.00	
Enzyme cooler	2	\$ 100.00	\$ 200.00	
Ring stand and clamps	1	\$ 100.00	\$ 100.00	For protein purification
Balance (0.1 mg precision, 50 g capacity)	1	\$ 1,200.00	\$ 1,200.00	
PPE	5	\$ 100.00	\$ 500.00	Lab coats and goggles for each student
5-gal carboy with spigot	1	\$ 200.00	\$ 200.00	For MilliQ water
EXPERIMENTAL CONSUMABLES - 2 YEARS			\$ 18,000	
PERSONNEL - 2 YEARS			\$ 15,000	
Undergraduate summer salary	2	\$ 5,000.00	\$ 10,000.00	Others may work for credit or apply to internal funding sources
Undergraduate annual salary	2	\$ 2,500.00	\$ 5,000.00	Others may work for credit
TOTAL			\$ 104,469	
ACCESS TO SHARED FACILITIES				
Freezer space, -80°C				Biology Department, Cold Storage Room
Centrifuge (18k xg, ~50 mL)				Biology Department, Centrifuge Room
Fluorescence platereader				Biology Department, Room 304
Circular dichroism spectrometer (for Tmelt)				Chemistry Department

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UV/Vis spectrometer (for Tmelt)				Chemistry Department
Differential scanning calorimeter (sub-mL volumes)				Chemistry Department
Autoclave				Biology Department, Workroom
Glass washing facilities				Biology Department, Workroom
Ice machine				Biology Department, Workroom
MilliQ water purification system				Biology Department, Workroom
Microbalance				Biology Department, Workroom
Analytical balance				Biology Department, Workroom
pH meter				Biology Department, Workroom
Gel documentation system (DNA, protein, Western)				Biology Department, Room 304
Shakers (chilled and warm)				Biology Department, Incubator Room and Classroom Lab
Incubators (37°C)				Biology Department, Incubator Room
Cluster rack storage				???
FACILITY UPDATES				
Additional bench-height table in lab, east wall				
Desk, bookshelves, file cabinets in office				
Large whiteboard for office				